

WHAT IS CLAIMED IS:

1. An illumination apparatus comprising:
a point light source;
5 a light guiding plate; and
a reflecting member for reflecting a light of said point light source,
wherein said light reflected by said reflecting member is incident on at least two
side surfaces of said light guiding plate.
- 10 2. An illumination apparatus according to claim 1, wherein an ink dot is
provided on an upper surface or a lower surface of said light guiding plate.
3. An illumination apparatus according to claim 1, wherein a prism having a
triangular cross-section is provided on an upper surface or a lower surface of said light
15 guiding plate.
4. An illumination apparatus according to claim 1, wherein a projection having
a rectangular or square cross-section is provided on an upper surface or a lower
surface of said light guiding plate.
- 20 5. An illumination apparatus according to claim 1, wherein a reflecting plate
is provided below said light guiding plate.
6. An illumination apparatus comprising:
25 a light guiding plate having a first side surface and a second side surface
perpendicular to said second surface; and

a point light source adjacent to an intersection of said first side surface and said second side surface,

wherein a light emitted from said point light source is incident on said first side surface and said second side surface of said light guiding plate and exit through an upper surface or a lower surface of said light guiding plate.

7. An illumination apparatus according to claim 6, wherein said point light source is surrounded by a reflecting member, said first side surface, and said second side surface.

8. An illumination apparatus according to claim 6, wherein an ink dot is provided on an upper surface or a lower surface of said light guiding plate.

9. An illumination apparatus according to claim 6, wherein a prism having a triangular cross-section is provided on an upper surface or a lower surface of said light guiding plate.

10. An illumination apparatus according to claim 6, wherein a projection having a rectangular or square cross-section is provided on an upper surface or a lower surface of said light guiding plate.

11. An illumination apparatus according to claim 6, wherein a reflecting plate is provided below said light guiding plate.

12. An illumination apparatus comprising:

a light guiding plate having a first side surface, a second side surface, and a third side surface, wherein said first side surface is not perpendicular to said second side surface and said third side surface; and

a point light source,

5 wherein a light emitted from said point light source is incident on a first side surface of said light guiding plate and exits through an upper surface or a lower surface of said light guiding plate.

13. An illumination apparatus according to claim 12, wherein said point light
10 source is surrounded with a first reflecting plate and said first side surface.

14. An illumination apparatus according to claim 12, wherein a reflecting plate
is provided so as to surround side surfaces and a lower surface of said light guiding
plate.

15 15. An illumination apparatus according to claim 12, wherein an ink dot is
provided on a lower surface of said light guiding plate.

16. An illumination apparatus according to claim 12, wherein a projection
20 having a rectangular cross-section is provided on a lower surface of said light guiding
plate.

17. An illumination apparatus comprising:

a first light guiding plate having a first side surface and a second side surface
25 perpendicular to said first side surface;

a second light guiding plate having a first side surface, an upper surface, and a lower surface, said upper surface and said lower surface being perpendicular to said first surface; and

a point light source,

5 wherein a light emitted from said point light source is incident on a first surface of said first light guiding plate and exit through a second side surface of said first light guiding plate, and

wherein said light exiting through said second side surface of said first light guiding plate is incident on said first side surface of said second light guiding plate,
10 and exit through said upper surface or said lower surface of said second light guiding plate.

18. An illumination apparatus according to claim 17, wherein said first light guiding plate has a shape of a rectangular prism.

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19. An illumination apparatus according to claim 17, wherein ink dots are provided on a side surface opposite to said first side surface of said first light guiding plate.

20 20. An illumination apparatus according to claim 17, wherein said ink dots are provided at a lower density as closer towards said point light source.

21. An illumination apparatus comprising:

a first light guiding plate having a first side surface and a second side surface
25 perpendicular to said first side surface;

a second light guiding plate having a first side surface, an upper surface, and

a lower surface, said upper surface and said lower surface being perpendicular to said first side surface, wherein said first light guiding plate has a larger refractive index than said second light guiding plate; and

a point light source,

5 wherein a light emitted from said point light source is incident on a first side surface of said first light guiding plate and exits through said second side surface of said first light guiding plate, and

wherein said light exiting through said second side surface is incident on a first side surface of said second light guiding plate which is in contact with said second
10 side surface of said first light guiding plate and exits through said upper surface or said lower surface of said second light guiding plate.

22. An illumination apparatus according to claim 21, wherein said refractive index of said first light guiding plate is between 1.8 and 3.0, and said refractive index
15 of said second light guiding plate is between 1.4 and 1.6.

23. A liquid crystal display device comprising:

a liquid crystal panel comprising a first substrate, a second substrate, and a liquid crystal interposed therebetween; and

20 a illumination apparatus adjacent to said liquid crystal panel for illuminating an image display plane of said liquid crystal panel, said illumination apparatus comprising:

a first light guiding plate having a first side surface and a second side surface perpendicular to said first side surface;

25 a second light guiding plate having a first side surface, an upper surface, and a lower surface, said upper surface and said lower surface being perpendicular to said

first surface; and

a point light source,

wherein a light emitted from said point light source is incident on a first surface of said first light guiding plate and exit through a second side surface of said first light
5 guiding plate, and

wherein said light exiting through said second side surface of said first light guiding plate is incident on said first side surface of said second light guiding plate, and exit through said upper surface or said lower surface of said second light guiding plate.

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24. A liquid crystal display device according to claim 23, wherein said first light guiding plate has a shape of a rectangular prism.

25. A liquid crystal display device according to claim 23, wherein ink dots are
15 provided on a side surface opposite to said first side surface of said first light guiding plate.

26. A liquid crystal display device according to claim 23, wherein said ink dots are provided at a lower density as closer towards said point light source.

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27. A liquid crystal display device according to claim 23, wherein said liquid crystal display device is a transmission type liquid crystal display device.

28. A liquid crystal display device according to claim 23, wherein said liquid
25 crystal display device is incorporated in one selected from the group consisting of a

personal computer, a digital camera, a mobile telephone, a video camera, and a car navigation system.

29. A liquid crystal display device comprising:

5 a liquid crystal panel comprising a first substrate, a second substrate, and a liquid crystal interposed therebetween; and

 an illumination apparatus adjacent to said liquid crystal panel for illuminating an image display plane of said liquid crystal panel, said illumination apparatus comprising:

10 a first light guiding plate having a first side surface and a second side surface perpendicular to said first side surface;

 a second light guiding plate having a first side surface, an upper surface, and a lower surface, said upper surface and said lower surface being perpendicular to said first side surface, wherein said first light guiding plate has a larger refractive index

15 than said second light guiding plate; and

 a point light source,

 wherein a light emitted from said point light source is incident on a first side surface of said first light guiding plate and exits through said second side surface of said first light guiding plate, and

20 wherein said light exiting through said second side surface is incident on a first side surface of said second light guiding plate which is in contact with said second side surface of said first light guiding plate and exits through said upper surface or said lower surface of said second light guiding plate.

30. An illumination apparatus according to claim 29, wherein said refractive index of said first light guiding plate is between 1.8 and 3.0, and said refractive index of said second light guiding plate is between 1.4 and 1.6.

5 31. A liquid crystal display device according to claim 29, wherein said liquid crystal display device is a transmission type liquid crystal display device.

32. A liquid crystal display device according to claim 29, wherein said liquid crystal display device is incorporated in one selected from the group consisting of a
10 personal computer, a digital camera, a mobile telephone, a video camera, and a car navigation system.